



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,386	10/16/2001	J. Thomas O'Brien	I-2-186.1US	7050

24374 7590 05/11/2005

VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

HARVEY, DIONNE

ART UNIT	PAPER NUMBER
----------	--------------

2643

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,386

Applicant(s)

O'BRIEN, J. THOMAS

Examiner

Dionne N. Harvey

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 17, 21 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bell (US 6,445,921)** in view of **Ostling (US 6,327,470)**.

Regarding claim 17, In figure 2, Bell teaches a wireless dual use user equipment (UE) **110** capable of establishing communication with remote terminal device through a cordless **150** or a mobile base station **130**, thereby reading on "capable of operating in a cordless and cellular environment";

Shown in figure 2, Bell teaches that the UE comprises a cordless section **215**, and cellular section **220**; disclosed in **column 2, lines 62-64**, Bell teaches that each section is provided with respective antennas **230,235**, and respective transmitter/receiver devices, in **column 3, lines 1-12**, Bell teaches that each transmitter comprises a modulator for modulating transmitted signals, and a demodulator for demodulating received signals, which reads on "the dual user equipment comprising: a modulation and demodulation device for modulating/demodulating data using a plurality of modulation/demodulation schemes,";

In figures 1 and 2, Bell teaches that the cordless section **215** via its' antenna **230**, transmitter/receiver and modulator/demodulator units, operates in two-way communication with cordless base station **150**, thereby reading on "the plurality of modulation/demodulation schemes comprise a cordless scheme for communicating with a sub base";

While the cellular section **220** via its' antenna **235**, transmitter/receiver and modulator/demodulator units, operates in two-way communication with cellular network **130**, thereby reading on "the plurality of modulation/demodulation schemes comprise ... a cellular scheme for communicating with a base station";

Also shown in figure 2 and discussed in **column 3, lines 63-66, column 4, lines 36-39 and column 4, 56-58**, Bell teaches that microprocessor **245** will automatically or by user initiation, switch between cordless operation and cellular operation, which reads on " a modulation and demodulation controller for switching the modulation/demodulation scheme of the modulation/demodulation device between the cordless scheme and the cellular scheme;"

In **column 3, lines 63-67**, Bell teaches that the switch between cellular and cordless modes result in handover between the cellular and cordless systems, thereby reading on "the modulation and demodulation controller initiating operation in the cellular environment by sending a handoff signal and switching to the cellular scheme;"

Bell does not clearly teach that the transition between said cordless and cellular schemes is transparent to the user sending or receiving a communication signal, nor

that the sub base station **150** in response to the sent handoff signal ceases communication with the cellular base station **130**.

Ostling teaches a means for providing handover between a fixed-wireline network and a mobile network for a dual mode phone, which reads on "capable of operating in a cordless and a cellular environment". In **column 3, lines 1-11**, Ostling teaches that the device allows a user to continue a conversation while moving from a fixed-wireline network, into a mobile network, without any interruption in the voice or data connection, which reads on "such that a transition between said cordless and cellular schemes is transparent to a user sending or receiving a communication signal from said dual use UE;"

and shown in figure 3 and discussed in **column 4, lines 1-15**, Ostling teaches that once a connection is established between the dual mode phone **305** and the mobile network **320**, the link between the end office **330**, which reads on "sub base" and the mobile network, which reads on "cellular base station" is disconnected.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Wenk and Ostling, providing a dual mode phone capable of transitioning between cordless and cellular schemes without service interruption, thereby allowing a user to move between a fixed-network and a mobile network, without the need for re-dialing the called party.

Regarding claim 21, in **column 3, lines 32-38**, Bell teaches that the cordless **215** and cellular **220** sections comprise received signal strength indicators (RSSI) **285,287** which indicate the strength of received signals and wherein the UE **110** can detect

whether or not the cellular service, or cordless service, or both services are available, thereby reading on "the dual use UE determines it is leaving the cordless environment by measuring a received signal strength of a sub base transmission."

Regarding claim 22, **column 3, lines 54-60** of the Ostling reference, taken in combination with the disclosure of the Bell reference, teaches that once the signal strength is determined to be below a predetermined threshold, the controller of the device switches to the cellular environment.

2. **Claims 23 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bell (US 6,445,921)** in view of **Ostling (US 6,327,470)**, as applied to claim 17 above, and further in view of **Wenk (US 6,253,088)**.

Regarding claim 23, the combination of Bell and Ostling does not clearly teach that the dual use UE determines it is entering the cordless environment by detecting a sub base pilot signal.

In **column 5, lines 32-36**, Wenk teaches that the cordless environment may be provided with infra-red proximity detection, reading on "a sub base pilot signal" so as to detect when the user equipment is within the cordless environment. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Bell, Ostling and Wenk, thereby incorporating a proximity detection system into the device so as to cause the dual mode phone to pre-emptively transition to the cordless environment when signal strength cannot be determined, i.e., situations wherein the user is not in the process of maintaining a voice or data connection.

Regarding claim 24, Wenk teaches that upon detecting the sub base pilot signal, the sub base commences communicating with the cellular network and the dual use UE begins communicating with the sub base.

Response to Arguments

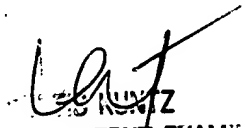
3. Applicant's arguments with respect to claims 17 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N Harvey whose telephone number is 703-305-1111. The examiner can normally be reached on 9-6:30 M-F and alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CURTIS KUNTZ
PATENT EXAMINER
EBC CENTER 20